

Notice of Allowability

Application No.

09/341,401

Examiner

Shawn S An

Applicant(s)

YANAGIHARA ET AL.

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/19/2004.
2. ☒ The allowed claim(s) is/are 1-8 and 14-19.
3. ☒ The drawings filed on 02 July 1999 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Reasons for Allowance

1. As per Applicant's instructions as filed on 7/19/04, claims 1, 14, and 18 have been amended.

2. Claims 1-8 and 14-19 are allowed.

3. The following is an Examiner's statement of reasons for allowance:

Claims 1-8 and 14-19 recite the novel features for digital signal conversion device/method, comprising:

decoding means for decoding a digital signal of a first format consisting of orthogonal transform coefficients;

inverse quantization means for inversely quantizing the decoded digital signal;

resolution conversion means for orthogonally transforming at least two blocks of the inversely Q decoded signal(s) and for extracting/interpolating a predetermined subset from a complete set of the orthogonal transform coefficients comprising less than the complete set of orthogonal transform coefficients from each of the at least two blocks of the digital signal of a first format with an orthogonal transform coefficient of a predetermined value, thus producing partial orthogonal transform coefficients from each of the at least two blocks and forming a new coupled block by connecting adjacent blocks represented by the extracted partial orthogonal transform coefficients of each of the at least two blocks;

quantization means for quantizing the digital signal processed by resolution conversion means including the new coupled block; and

coding means for coding the quantized digital signal, thus generating a second digital signal of second format consisting of new orthogonal transform coefficients, the new orthogonal transform coefficients being composed of the predetermined subsets of the orthogonal transform coefficients of each of the at least two blocks;

wherein the resolution conversion means multiplies a first matrix, a second matrix, and a third matrix, so as to form the new coupled block, the first matrix

comprising the partial orthogonal transform coefficients, the second matrix comprising two inverse discrete transform matrices on a diagonal, and the third matrix comprising discrete transform coefficients.

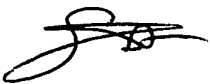
The prior art of records fail to anticipate or make obvious the novel features.

Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S. An* whose telephone number is 703-305-0099. The Examiner can normally be reached on Flex hours (10).

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



SSA

Primary Patent Examiner

1/7/05